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## **DETAILED ACTION**

In response to the Office action mailed on November 16, 2007 the
Amendment has been received in March 24, 2008.

Claims 2, 3, 6-10, 12, 13, 15, 17-22, 25 have been amended.

Claims 1, 5, 16, 23 and 24 have been canceled.

Claims 26-28 have been newly added.

Claims 2-4, 6-15, 17-22 and 25-28 are currently pending in this application.

## Allowable Subject Matter

- 2. Claims 2-4, 6-15, 17-22 and 25-28 are allowed.
- 3. The following is an examiner's statement of reasons for allowance:

Claim 2 is allowed because prior art fails to teach or make obvious a method of measuring in real time a radiological radiation dose absorbed by a region under inspection subjected to a flux of radiological radiation, the method comprising the steps consisting in: measuring a light signal away from the region under inspection after it has been transmitted along the measurement optical fiber; and determining the dose of radiological radiation received by the measurement optical fiber on the basis of the light signal and a position where the radiological radiation is detected along the measurement optical fiber, the dose of radiological radiation received at the position

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being calculated as a function of at least one parameter  $F^0_k$  specific to the optical fiber as claimed in combination with all of the remaining limitations of the claim.

Claim 17 is allowed because prior art fails to teach or make obvious a device for real-time measurement of a dose of radiological radiation absorbed by a region under inspection subjected to a flux of radiological radiation, the device comprising: an X-ray transparent dosimeter; and means for determining the dose of radiological radiation received by a measurement optical fiber on the basis of said light signal; and in which the light signal is transmitted to a detector device used for measuring it, transmission taking place along the measurement optical fiber used for detecting the radiation, the fiber having a first end, and along at least one clear optical fiber extending from a first end of the clear fiber that is connected to the first end of the measurement optical fiber to a second end of the clear fiber, which second end is placed facing a detector device, and in which the means for determining the dose of radiation received at a point of the measurement optical fiber comprise a control unit containing parameters that are specific to the optical fibers used as claimed in combination with all of the remaining limitations of the claim.

Claim 18 is allowed because prior art fails to teach or make obvious a device for real-time measurement of a dose of radiological radiation absorbed by a region under inspection subjected to a flux of radiological radiation, the device comprising: an X-ray transparent dosimeter; and means for determining the dose of radiological radiation received by the measurement optical fiber on the basis of said light signal; and in which the first fiber bundle is disposed along a first direction and in which the dosimeter further

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comprises a second bundle of optical fibers comprising at least one second measurement optical fiber disposed in a second direction forming an angle with the first direction as claimed in combination with all of the remaining limitations of the claim.

Claim 21 is allowed because prior art fails to teach or make obvious a device for real-time measurement of a dose of radiological radiation absorbed by a region under inspection subjected to a flux of radiological radiation, the device comprising: an X-ray transparent dosimeter; and measurement means for measuring a light signal away from the region under inspection after the light signal has been transmitted along the measurement optical fiber; and means for determining the dose of radiological radiation received by a measurement optical fiber on the basis of the light signal; and in which at least one bundle of optical fibers is integrated in an examination table as claimed in combination with all of the remaining limitations of the claim.

Claim 22 is allowed because prior art fails to teach or make obvious a radiological installation comprising: an X-ray transparent dosimeter comprising at least one bundle having at least one measurement optical fiber placed in a region under inspection, and adapted to generate a light signal on receiving radiological radiation, so as to enable the incident radiation to be detected at least one point of said region under inspection; measurement means for measuring said light signal away from the region under inspection after it has been transmitted along the measurement optical fiber; and means for determining the dose of radiological radiation received by the measurement optical fiber on the basis of said light signal, and further comprising: a radiation generator; a radiographic detector; and means for displaying the radiation dose

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received, the means also enabling radiographic images to be displayed of the region under inspection as supplied by the radiographic detector; an examination table; and wherein the at least one bundle of measurement optical fibers is integrated in the examination table as claimed in combination with all of the remaining limitations of the claim.

Claim 26 is allowed because prior art fails to teach or make obvious a method of measuring in real time a radiological radiation dose absorbed by a region under inspection subjected to a flux of radiological radiation, the method comprising the steps consisting in: detecting the incident radiation at at least one point of the region under inspection using an X-ray transparent dosimeter; measuring said light signal away from the region under inspection after it has been transmitted along the measurement optical fiber; and determining the dose of radiological radiation received by the measurement optical fiber on the basis of the light signal as claimed in combination with all of the remaining limitations of the claim.

Claims 3, 4, 5-15, 19, 25, 27 and 28 are allowed by virtue of their dependence.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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## Response to Arguments

4. Applicant's arguments, see pages 9 and 10, filed March 24, 2008, with respect to claims have been fully considered and are persuasive. The rejection of claims 1, 8-26, 29, 20, 22 and 23 and objection of claims 2-7, 17, 18, 21 and 25 has been withdrawn.

## Conclusion

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shinar et al. (US Patent 6,320,935 B1) teaches determining the dose of radiation received by the measurement optical fiber.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to IRAKLI KIKNADZE whose telephone number is (571)272-2493. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Irakli Kiknadze/

Examiner, Art Unit 2882

/I. K,/ June 8, 2008